



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/487,529	01/19/2000	David A. Wood	5181-38400	3267

7590 01/15/2004

B. NOEL KIVLIN
MEYERTONS, HOOD, KIVLIN, KOWERT & GOETZEL, P.C.
P.O. BOX 398
AUSTIN, TX 78767-0398

EXAMINER

HOANG, PHUONG N

ART UNIT	PAPER NUMBER
----------	--------------

2126

DATE MAILED: 01/15/2004

8

Please find below and/or attached an Office communication concerning this application or proceeding.

2

Office Action Summary

Application No.

09/487,529

Applicant(s)

WOOD ET AL.

Examiner

Phuong N. Hoang

Art Unit

2126

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 October 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 - 20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 - 20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. Claims 1 – 20 are presented for examination.

Claim Rejections - 35 USC § 102

2. The section of 35 U.S.C. 102 can be found in the previous office action.
3. **Claims 1 – 20 are rejected under 35 U.S.C. 102(e) as being anticipated by Chambers, US patent no. 5,884,052.**

As to claim 1, Chambers teaches a computer system comprising:

a first device (initiator PCI agent, col. 5); and
a second device (target PCI agent, col. 5) coupled to the first device;
wherein the first device is configured to convey a first request (data transaction, col. 5 lines 15 – 20) to the second device, wherein the second device is configured to receive the first request, wherein the second device is configured to detect a temporarily unavailable condition (internal access latency, col. 5 lines 25 – 40), wherein the second device is configured to convey a response (the target issued a retry, col. 5) to the first device corresponding to the first request, and wherein the response includes a delay value (delay input, col. 5 lines 45 – 55) corresponding to the temporarily unavailable condition.

As to claim 2, Chamber teaches the first device is configured to receive the Response (using the delay input, col. 5 lines 50 – 55), and wherein the first device is configured to convey a second request (the initiator waits until the expiration of the

target's internal access latency and then accesses the target again, col. 5 lines 30 – 40) to the second device at a time corresponding to the delay value.

As to claim 3, Chamber teaches the computer system of claim 1, wherein the second device is configured to generate delay value (delay input, col. 5 lines 45 – 55) according to a type of the temporarily unavailable condition.

As to claim 4, Chamber teaches the computer system of claim 1, wherein the delay value corresponds to a first value in response to the temporarily unavailable condition (The known internal access latency period is characterized as a “delay input”, col. 5 lines 45 – 55) corresponding to a first type of condition and wherein the delay value corresponds to a second value in response to the temporarily unavailable condition corresponding to a second type of condition.

As to claim 5, Chamber teaches the computer system of claim 1, wherein the second device is configured to calculate delay value using one or more variables (the variable retry strategy of the present invention can be characterized as “n, 2,2,2...”, col. 6 lines 6 – 43) that correspond to one or more previous temporarily unavailable conditions.

As to claim 6, Chamber teaches the computer system of claim 1, wherein the delay value corresponds to an encoded value (n, col. 6 lines 6 – 43).

As to claim 7, Chamber teaches the computer system of claim 1, farther comprising:

a policy layer (smart retry state machine 502, col. 7 lines 6 – 50) coupled to the first device and second device, wherein the policy layer is configured to cause an error

Art Unit: 2126

recovery mechanism (smart retry state machine 502, col. 7 lines 6 – 50) to be initiated in response to detecting that a retry limit corresponding to the first request is exceeded, and wherein the error recovery mechanism is configured to perform an action according to the response.

As to claim 8, see claim 1 accept for a communications medium. Further, Chamber teaches a communications medium (PCI bus connector 403).

As to claim 9, Chamber teaches the computer system of claim 8, wherein the communications medium comprises a switching network (LAN of fig. 1).

As to claim 10, Chamber teaches the computer system of claim 8, wherein the communications medium comprises a shared bus (PCI bus, col. 6 – 8).

As to claim 11, Chamber teaches the computer system of claim 8, wherein the communications medium comprises an arbitrated loop (the PCI agent attempts a subsequent access.....arbitrates for and acquires ownership of the PCI bus, col. 8 lines 40 – 50).

As to claim 12, see claim 3 above.

As to claim 13, see claim 6 above.

As to claim 14, see claim 7 above.

As to claim 15, see claim 1 above.

As to claim 16, see claim 2 above.

As to claim 17, Chamber teaches the method of claim 15, further comprising:

initiating an error recovery mechanism (smart retry state machine 502, col. 7 lines 6 – 50) corresponding to the response in response to determining that a retry limit corresponding to the first request has been exceeded.

As to claim 18, see claim 6 above.

As to claim 19, Chamber teaches the method of claim 15, wherein the generating further comprises:

determining a type of the temporarily unavailable condition (determine the internal access latency, col. 5 - 6); and

generating the delay value (delay input, col. 5 lines 45 – 55) according to the type of the temporarily unavailable condition.

As to claim 20, see claim 5 above.

Response to Arguments

4. Applicant's arguments filed on 10/20/03 have been fully considered but they are not persuasive.

5. In the remark, applicant argued that Chambers fails to teach "the second device is configured to detect a temporarily unavailable condition, wherein the second device is configured to convey a response to the first device corresponding to the first request, and wherein the response includes a delay value corresponding to the temporarily unavailable condition (page 7 last paragraph). The policy layer is configured to cause an error recovery mechanism to be initiated in response to detecting that a retry limit

Art Unit: 2126

corresponding to the first request is exceeded, and wherein the error recovery mechanism is configured to perform an action according to the response (page 8 second paragraph).

6. In response,

Applicant fails to point out how the claimed limitations are not met. Chambers teaches all claimed limitations. Chambers teaches a second device (target PCI agent, col. 5) coupled to the first device (initiator PCI agent, col. 5); wherein the first device is configured to convey a first request (data transaction, col. 5 lines 15 – 20) to the second device, wherein the second device is configured to receive the first request, wherein the second device is configured to detect a temporarily unavailable condition (internal access latency, col. 5 lines 25 – 40), wherein the second device is configured to convey a response (the target issued a retry, col. 5) to the first device corresponding to the first request, and wherein the response includes a delay value (delay input, col. 5 lines 45 – 55) corresponding to the temporarily unavailable condition. Chambers teaches a policy layer (smart retry state machine 502, col. 7 lines 6 – 50) coupled to the first device and second device, wherein the policy layer is configured to cause an error recovery mechanism (smart retry state machine 502, col. 7 lines 6 – 50) to be initiated in response to detecting that a retry limit corresponding to the first request is exceeded, and wherein the error recovery mechanism is configured to perform an action according to the response.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phuong N. Hoang whose telephone number is (703) 605-4239. The examiner can normally be reached on Monday - Friday 9:00 am to 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (703)305-9678. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)746-7140.

Application/Control Number: 09/487,529
Art Unit: 2126

Page 8

Ph

January 7, 2004



MENG-AL T. AN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100